



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,596	12/26/2006	Toru Wada	239129	2502
23460 7590 05/20/2009 LEYDIG VOIT & MAYER, LTD TWO PRUDENTIAL PLAZA, SUITE 4900 180 NORTH STETSON AVENUE CHICAGO, IL 60601-6731				
EXAMINER HAMILTON, CYNTHIA				
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
05/20/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/552,596

**Applicant(s)**

WADA ET AL.

**Examiner**

Cynthia Hamilton

**Art Unit**

1795

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02/27/09, 02/11/2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-15, 18-25, 27 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 16, 17 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 02/11/2009.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claim 15 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 15 is dependent upon cancelled claim 2 thus fails to be in proper dependent form as there is no claim 2 to further limit. The examiner notes that since what was claim 2 was put into claim 1 that claim 15 if made dependent upon claim 1 would be a duplicate claim of claim 14 and would be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants point to page 21, lines 24 through page 22, line 2, for support for the amendment made to claim 13. The amendment is defining the cosolvent in line 4 as “comprising isopropyl alcohol and n-propyl acetate”. The support found at page 21, lines 24 through page 22, line 2, is

more specific than the amended passage in claim 13. What is originally disclosed in the specification is a mixture of an isopropyl alcohol blended in a general cosolvent ink and an n-propyl acetate at a weight ratio of 8:2.” Thus, the broader “comprising isopropyl alcohol and n-propyl acetate” for the cosolvent is not fully supported by the original disclosure thus was not disclosed in a manner to reasonably convey to one skilled in the art that the inventor had possession of such a resin with such properties of change in compressive elasticity to all ranges of cosolvent “comprising isopropyl alcohol and n-propyl acetate”. Thus, claim 13 fails to comply with the written description requirement.

4. Claims 6 and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants have amended claim 6 to recite that the component (E) is a “copolymer comprising a carboxylic acid comonomer” but have not pointed to support in the original disclosure for this amendment. The original wording of “carboxylic acid-based copolymer” does not clearly support this genus of a copolymer comprising a carboxylic acid comonomer and applicants have no other example of the “carboxylic acid-based copolymer” beyond that of tradename material as found on page 15 referenced as Aron A-7070, Aron A-7050, Aron B-300, Aron B-500 and Aron B-700. There is no clear teaching that by “carboxylic acid-based copolymer” is intended “copolymer comprising a carboxylic acid comonomer”. The examiner believes that a worker of ordinary skill in the art upon reading the original disclosure would

come to this conclusion as to what was meant either. Thus, with respect to instant claims 6 and 19, the claimed invention fails to comply with the written description requirement.

5. Claims 9-10, 22-23 and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants have added "photopolymerizable" to "a conjugated diene oligomer having no crosslinking group" in claim 9 such that it reads "a conjugated diene oligomer having no photopolymerizable crosslinking group". The support given by applicants for this change is "which is understood based on the teaching in the specification". No other support is given. Thus applicants failed to show support for such an addition to claims 9-10 and 22-23 as well as in newly submitted claim 27. An example on page 40, line 12-15, of the disclosed "a conjugated diene oligomer having no crosslinking group" is the conjugated diene oligomer B2000 produced by Nippon Petrochemicals. The only way that an conjugated diene oligomer would not have in chain or side group crosslinking vinyl function would be if it was fully hydrogenated. The nature of butadiene polymerization yields a polymer residual vinyl content. Otsuki et al (EP 1013710 A1) in [0042] on page 7 that B-2000, a product of Nippon Petrochemicals has a vinyl group content of 65 % thus clearly a worker of ordinary skill in the art of polymers of diene conjugation would realize there are present crosslinking groups in conjugated diene oligomer B2000 produced by Nippon Petrochemicals. Applicants argue that by the addition of "photopolymerizable" that the pendant vinyl groups found evidenced to be in B-2000 are no longer of issue. Page 60 of Goodman et al shows where the vinyl group content

is in polybutadiene, generally. Applicants have not made clear why the vinyl groups would not be photopolymerizable, nor have applicants made clear what is encompassed by "a conjugated diene oligomer having no photopolymerizable crosslinking group". Thus with respect to instant claims 9-10, 22-23 and 27, applicants have failed to show support in the original disclosure for the addition of "photopolymerizable" in "a conjugated diene oligomer having no photopolymerizable crosslinking group".

6. The Declaration under 37 CFR 1.132 filed 27 February 2009 is sufficient to overcome the rejection of claims 1-25 rejected under 35 USC 112, second paragraph as being indefinite with respect to the measuring of the fine particle distribution after photopolymerization to determine the fine particle distribution before photopolymerization. The examiner accepts the explanation of Toru Wada that because the particles do not change in nature from before and after photopolymerization that because of ease of measurement the measuring is done after curing but yields the same distribution. Thus, the examiner removes issues of indefiniteness with respect to this measurement not part of all claims.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 5, 7-8, 11-14, 18, 20-21 and 24-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al (US 6,197,479 B1). With respect to instant claims 1, 5, 7-8, 11-14, 18, 20-21 and 24-25, the compositions and plates formed therefrom of Examples 1 and 4-7 of Tanaka et al anticipate the instant invention. "A generic claim cannot be allowed to an applicant

if the prior art discloses a species falling within the claimed genus.” The species in that case will anticipate the genus. *In re Slayter*, 276 F.2d 408, 411, 125 USPQ 345, 347 (CCPA 1960); *In re Gosteli*, 872 F.2d 1008, 10 USPQ2d 1614 (Fed. Cir. 1989). In the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 UAPQ2d 1934 (Fed. Cir. 1990). See particularly MPEP 2144.05. With respect to the plates and compositions of Tanaka et al. The Synthesis Examples 1, 2 and 4 of Tanaka et al are clearly polymers prepared from a latex rubber dispersion in water and have number average particle size of sufficient difference when combined as in the Examples given as to yield the required differences in peaks and the ratios respective of particle size in instant claim 2. With respect to instant claim 7, component B prevents aggregation as set forth by Tanaka et al at col. 3, lines 13-17. With respect to instant claim 8 and 21, the latex of Synthesis Example 1 has present a non ionic surfactant in polyoxyethylene nonyl phenyl ether present which moves to the composition as a whole when the latex is used.

9. Applicant's arguments filed 27 February 2009 have been fully considered and they are persuasive with respect to claims 3-4 and 16-17 but not persuasive with respect to claims 1, 5, 7-8, 11-14, 18, 20-21 and 24-25. The examiner agrees with applicant's reasons why with respect to Tanaka et al that NBR3 is not hydrophilic however, this only removes rejections of claims 3-4 and 16-17. Applicants present no other reason to remove rejections of 1, 5, 7-8, 11-14, 18, 20-21 and 24-25 as being anticipated by Tanaka et al (US 6,197,479 B1) other than Tanaka et al essentially requires a synthetic rubber which is not used in the present invention. The instant

invention is not closed thus the addition of other components is not excluded. The rejection stands as modified.

10. The examiner agrees with applicants arguments with respect to rejections over Sasashita et al (US 5,916,732) thus removes this rejection over claims 1, 5-8, 133-15 and 18-21 as now amended.

11. Applicants arguments with respect to rejections over Nakamori et al is assumed to be JP 10-148930 A but notes that original claim 2 was not rejected over JP 10-148930 A thus, no longer reads on the instant claimed invention thus removes all rejections of record in the last Office Action.

12. Applicant's arguments filed 27 February 2009 have been fully considered with Okazaki et al, which is assumed to reference JP 2002-062639 a, does not comprise hydrophobic polymer obtained from at least two or more water dispersion latexes, in which the tow or more hydrophobic polymer are each present in a fine particle state. Thus rejections over Claims 1-25 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over TOYOBO CO., LTD (JP 2002-062639 A and abstract attached by applicants) as further evidenced by English Translation (AIPN) thereof are withdrawn.

13. Applicant's arguments filed 27 February 2009 have been fully considered with Sasashita II assumed to reference rejections over JP 2000-214594 a and because the limits of claim 2 have been made part of all of the claimed invention as now amended, the examiner agrees that there is no showing of the required fine particle distribution required by applicants in JP 2000-214594 a.

14. Applicant's arguments filed 27 February 2009 have been fully considered in view of Obata et al which is assumed to reference JP 09-031337A. The examiner concurs that the



present of two fine particle hydrophobic polymers in the photosensitive resin is not disclosed, thus she removes rejections in view of JP 09-031337A for this reason.

15. Claims 3-4, 16-17 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is 571-272-1331. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00 pm.*

*If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571) 272-0729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.*

*Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.*

/Cynthia Hamilton/  
Primary Examiner, Art Unit 1795

May 18, 2009